

Claims

1. (Currently amended) A wireless data communication method, comprising:

plug connecting a wireless communication device to an a structural, external interface of a first computing device, the wireless communication device previously being distinct from the first computing device and including a private memory component with a data output service;

drawing power to the wireless communication device from the first computing device for operating the wireless communication device;

installing and executing on the first computing device a computer wireless communication software application from a the private memory component of the wireless communication device automatically upon ~~connection~~ of plug connecting the wireless communication device to the structural, external interface of the first computing device, the private memory component not being accessible or viewable by a user and providing storage of the wireless communication software application that is secure from being viewed or accessed, the ~~computer~~ wireless communication software application running on the first computing device providing access to the data output service of the first computing device for a second computing device via wireless communication;  
~~transmitting by wireless communication data content from a second computing device to the communication device;~~

~~passing the data content from the communication device to the first computing device;~~ and

~~passing the data content from first computing device to the data output service associated with the first computing device~~ activating the wireless communication of the wireless communication device to provide wireless data access for the first computing device via the wireless communication device that is plug connected to the first computing device.

2. (Cancelled)

3. (Currently amended) The method of claim 1, further comprising:

disconnecting the wireless ~~data output~~ communication device from the structural, external interface of the first computing device ~~after passing the data content from computer software application to the data output service~~; and the wireless communication software application automatically uninstalling the ~~computer~~ wireless communication software application from the first computing device upon disconnection of the wireless communication device from the structural, external interface of the first computing device.

4. (Currently amended) The method of ~~claim 4~~ claim 58 in which ~~transmitting~~ receiving the data content to at the wireless communication device includes storing the data content in ~~the a file storage~~ a file storage memory component of the wireless communication device, the file storage segment being distinct from the private memory component in being accessible by the first computing device to store the data content.

5. (Cancelled)

6. (Currently amended) The method of claim 1 in which the structural, external interface corresponds to a universal serial bus interface.

7. (Previously presented) The method of claim 1 in which the wireless communication corresponds to a Bluetooth standard of wireless communication.

8. (Previously presented) The method of claim 1 in which the wireless communication corresponds to a IEEE 802.11 standard of wireless communication.

9. (Currently amended) The method of ~~claim 4~~ claim 58 in which the data output ~~service includes printing device~~ includes a printing device that provides printing of the data content ~~to one or more selected printers.~~

10. (Currently amended) The method of ~~claim 4~~ claim 58 in which the data output ~~service includes displaying device~~ includes a display device that provides display of the data content ~~on a display device.~~

11. (Currently amended) The method of ~~claim 4~~ claim 58 in which the data output ~~service includes projecting the data content onto a projection screen~~ device includes a sound output device that provides output of sound data.

12. (Currently amended) The method of claim 1 in which the wireless communication device is configured as a dongle.

13. (Currently amended) The method of ~~claim 4~~ claim 58 in which the ~~second~~ remote computing device includes a wireless mobile telephone.

14. (Currently amended) The method of claim 4 58 in which the ~~second~~ remote computing device includes a mobile computing device.

15. (Currently amended) The method of ~~claim 4~~ claim 58 in which the ~~second~~ remote computing device includes a digital camera.

16. (Currently amended) The method of claim 1 in which the ~~computer~~ wireless communication software application includes a wireless communication stack component.

17. (Cancelled)

18. (Currently amended) The method of ~~claim 4~~ claim 56 further comprising selecting one or more output devices at the ~~second~~ remote computing device prior to transmitting by wireless communication ~~computer~~ information from the ~~second~~ remote computing device to the first computing device.

19. (Currently amended) A data communication method, comprising:  
~~transmitting by wireless communication~~ receiving at a data communication device data content from a first remote computing device to a ~~wireless data output communication device~~;

storing the data content in a memory component of the data communication device;

plug connecting the data communication device to an a structural, external interface of a ~~second~~ first computing device with that includes a data output service device;

drawing power to the data communication device from the first computing device for operating the data communication device;

installing and executing on the ~~second~~ first computing device a ~~computer~~ data communication software application from a private memory portion of the memory component automatically upon connection of the data

communication device to the structural, external interface of the second first computing device, the private memory component not being accessible or viewable by a user and providing storage of the data communication software application that is secure from being viewed or accessed, the computer data communication software application providing the data content with access to the data output service device of the second first computing device via the wireless data communication device;

passing the data content from the data communication device to the computer data communication software application on the second first computing device; and

passing the data content from ~~computer~~ the data communication software application to the data output ~~service of device of~~ device of the second first computing device.

20. (Cancelled)

21. (Currently amended) The method of claim 19, further comprising:

disconnecting the wireless data output communication device from the structural, external interface of the second first computing device after passing the data content from ~~computer wireless data communication~~ data communication software application to the data output service device; and

the data communication software application automatically uninstalling the computer data communication software application from the second first computing device upon disconnection of the data communication device from the structural, external interface of the second first computing device.

22. (Currently amended) The method of claim 19 in which the ~~computer~~ the data communication device includes a wireless component and the data communication software application includes a wireless communication stack software application.

23. (Currently amended) The method of claim 19 in which the data communication device includes a battery operable to power operation of the data communication device.

24-39. (Cancelled)

40. (Currently amended) ~~The method of claim 1 in which the wireless-communication correspond to a Zigbee standard of wireless communication~~  
claim 22 further comprising receiving at the data communication device via  
wireless communication data content from the remote computing device.

41. (Currently amended) The method of ~~claim 40~~ claim 19 in which the data output service ~~device further~~ includes an audio output device for outputting digital ~~data~~ content ~~to a sound output device.~~

42. (Currently amended) The method of ~~claim 4~~ claim 22 in which the computer ~~wireless communication~~ software application includes a wireless-application software that provides the first computing device with wireless-~~capability to communicate with the second computing device~~ Internet access.

43. (Currently amended) The method of claim 19 in which the output service ~~includes displaying data content on~~ device includes a display device for displaying data content.

44. (Currently amended) The method of claim 19 in which the output service ~~includes outputting~~ device outputs digital content ~~to that includes~~ a sound output device.

45. (Previously presented) The method of claim 19 in which the data content includes one or more of video data content, sound data content, document data content, display data content, and projection data content.

46. (Currently amended) The method of claim 19 in which the first computing device is a mobile device.

47. (Previously presented) The method of claim 19 in which the ~~second~~ remote computing device is a mobile device.

48. (Currently amended) A wireless data communication method, comprising:

plug connecting a wireless communication device to ~~an~~ a structural, external interface of a first computing device with a data output component, the wireless communication device previously being distinct from the first computing device;

drawing power to the wireless communication device from the first computing device for operating the wireless communication device;

installing and executing on the first computing device a wireless communication software application from the a private memory component of the wireless communication device, the private memory component not being accessible or viewable by a user and providing storage of the wireless communication software application that is secure from being viewed or accessed, the wireless communication software application enabling output of data content from a remote computing device via providing access to the data-output component of the first computing device, the remote computing device being distinct from the wireless communication device and the first computing device;

~~transmitting~~ receiving by wireless communication data content from ~~a second~~ the remote computing device to the wireless communication device;

storing the data content in a non private memory component of the wireless communication device;

retrieving the data content from ~~a~~ the non-private memory component of the wireless communication device and passing the data content from the wireless communication device to the wireless communication software application on the first computing device; and

passing the data content from the wireless communication software application to the data output component of the first computing device.

49. (Previously presented) The method of claim 48 in which the output component includes a display screen.

50. (Currently amended) The method of claim 48 in which the output component includes a projector device for projecting data content to a projection ~~screen~~ display.

51. (Currently amended) The method of claim 48 in which the computer wireless communication software application is installed and executed automatically upon ~~connection of~~ plug connecting the wireless communication device to the structural, external interface of the first computing device.

52. (Previously presented) The method of claim 48 in which the output component includes a sound output device.

53. (Previously presented) The method of claim 48 in which the output component includes a printer.

54. (Currently amended) The method of claim 48 in which the data content includes one or more of video data content, sound data content, document data content, display, and projection data content.

55. (Currently amended) A data communication method, comprising:  
plug connecting a data communication device with a memory component to an a structural, external interface of a first remote computing device;

drawing power to the data communication device from the remote computing device for powering the data communication device;

transmitting receiving at the data communication device data content from the first remote computing device ~~to the data communication device~~, storing the data content in the memory component of the data communication device, and disconnecting the data communication device from the structural, external interface of the first computing device;

plug connecting the data communication device to an a structural, external interface of a ~~second~~ first computing device with a data output service device, installing and executing on the ~~second~~ first computing device a computer software application from a private component of the memory component automatically upon connection of the data communication device to the structural, external interface of the second computing device, the computer software application providing access to the ~~data output service of the second~~ data content for rendering it at the data output device of the first computing device;

passing at least part of the data content from the memory component of the data communication device to the computer software application on the ~~second~~ first computing device and passing the data content from the computer

software application to the data output ~~service~~ device of the ~~second~~ first computing device; and

disconnecting the data communication device from the structural, external interface of the ~~second~~ first computing device and automatically uninstalling the computer software application from the ~~second~~ first computing device, including automatically deleting any temporary files used by the computer software application residing in the ~~second~~ first computing device.

56. (New) The method of claim 55 in which storing the data content in the memory component of the data communication device includes storing the data content in a protected memory component of the data communication device, only the computer software application providing access to the data content.

57. (New) The method of claim 55 in which the data communication device includes a wireless component and the computer software application includes a wireless application, the method further comprising receiving at the data communication device data content from the remote computing device via wireless communication.

58. (New) The method of claim 1 in which the first computing device includes an data output device associated with the first computing device, the method further including:

receiving by wireless communication data content at the wireless communication device from a remote computing device, the remote computing device being a distinct device from the first computing device and the wireless communication device;

passing the data content from the wireless communication device to the first computing device; and

passing the data content from first computing device to the data output device associated with the first computing device.

59. (New) The method of claim 1 in which the wireless data access for the first computing device includes Internet access for the first computing device.



60. (New) A portable wireless data communication device plug connectable to a structural, external interface of a first computing device, the wireless communication device previously being distinct from the first computing device and including a private memory component, the wireless data communication device comprising

means for drawing power to the wireless communication device from the first computing device for operating the wireless communication device upon plug connecting the wireless communication device to the structural, external interface of the first computing device;

means for installing and executing on the first computing device a wireless communication software application from a private memory component of the wireless communication device automatically upon plug connecting the wireless communication device to the structural, external interface of the first computing device, the private memory component not being accessible or viewable by a user and providing storage of the wireless communication software application that is secure from being viewed or accessed, the wireless communication software application running on the first computing device activating the wireless communication of the wireless communication device to provide wireless data access for the first computing device via the wireless communication device that is plug connected to the first computing device; and

means for providing the first computing device with Internet access.

61. (New) A portable wireless data communication device plug connectable to a structural, external interface of a first computing device with a data output component, the wireless communication device previously being distinct from the first computing device, the wireless data communication device comprising:

means for drawing power to the wireless communication device from the first computing device for operating the wireless communication device;

means for installing and executing on the first computing device a wireless communication software application from a private memory component of the wireless communication device automatically upon plug connecting the

wireless communication device to the structural, external interface of the first computing device, the private memory component not being accessible or viewable by a user and providing storage of the wireless communication software application that is secure from being viewed or accessed;

means for enabling output of data content from a remote computing device via the first computing device, the remote computing device being distinct from the wireless communication device and the first computing device;

means for receiving data content from the remote computing device to the wireless communication device; and

means for passing the data content from the wireless communication device to the wireless communication software application on the first computing device for output of the data content at the data output component of the first computing device.

62. (New) A portable data communication device, comprising

means for receiving data content from a remote computing device at a data communication device;

means for storing the data content in a memory component of the data communication device;

means for plug connecting the data communication device to a structural, external interface of a first computing device that includes a data output device;

means for drawing power to the wireless communication device from the first computing device for operating the data communication device;

means for installing and executing on the first computing device a data communication software application from a private memory portion of the memory component automatically upon connection of the data communication device to the structural, external interface of the first computing device, the private memory component not being accessible or viewable by a user and providing storage of the data communication software application that is secure from being viewed or accessed, the data communication software application

providing access of the data content to the data output device of the first computing device via the data communication device; and

means for passing the data content from the data communication device to the data communication software application on the first computing device for output of data content at the output device associated with the first computing device.

63. (New) A portable data communication device with a memory component and plug connectable to a structural, external interface of a remote computing device, the data communication device comprising:

means for drawing power to the data communication device from the remote computing device for powering the data communication device;

means for receiving at least part of the data content from the remote computing device to the data communication device;

means for storing at least part of the data content in the memory component of the data communication device;

means for disconnecting the data communication device from the structural, external interface of the first computing device;

means for plug connecting the data communication device to a structural, external interface of a first computing device with a data output device;

means for installing and executing on the first computing device a computer software application from a private component of the memory component automatically upon connection of the data communication device to the structural, external interface of the second computing device, the computer software application providing access to the data content for rendering at the output device associated with the first computing device;

means for passing at least part of the data content from the memory component of the data communication device to the computer software application on the first computing device for rendering the data content at the data output device associated with first computing device;

means for disconnecting the data communication device from the structural, external interface of the first computing device, and upon disconnecting the data communication device from the structural, external interface of the first computing device, the computer software application automatically uninstalling the computer software application from the first computing device, including automatically deleting any temporary files used by the computer software application residing in the first computing device upon disconnecting.